

**IT IS THE VENDOR'S RESPONSIBILITY TO
CHECK FOR ADDENDA PRIOR TO SUBMITTING PROPOSALS**

**NOTICE TO BIDDERS
SPECIFICATION NO. 04-136**

The City of Lincoln, Nebraska intends to purchase and invites you to submit a sealed bid for:

Annual Supply of Street Sweeper Broom Stock

Sealed bids will be received by the City of Lincoln, Nebraska on or before 12:00 noon Wednesday, May 26, 2004, in the office of the Purchasing Agent, Suite 200, K Street Complex, Southwest Wing, 440 South 8th Street, Lincoln, Nebraska 68508. Bids will be publicly opened and read at the K Street Complex.

Bidders should take caution if U.S. mail or mail delivery services are used for the submission of bids. Mailing should be made in sufficient time for bids to arrive in the Purchasing Division, prior to the time and date specified above.

PROPOSAL
SPECIFICATION NO. 04-136
BID OPENING TIME: 12:00 NOON
DATE: Wednesday, May 26, 2004

The undersigned, having full knowledge of the requirements of the City of Lincoln for the below listed phases and the contract documents (which include Notice, Instructions, this Proposal, Specifications, Contract, and any and all addenda) and all other conditions of the Proposal, agrees to enter into a contract with the City the below listed fees for the performance of this Specification, complete in every respect, in strict accordance with the contract documents at and for fees listed below.

ADDENDA RECEIPT: The receipt of addenda to the specification numbers _____ through _____ are hereby acknowledged. Failure of any submitter to receive any addendum or interpretation of the specifications shall not relieve the submitter from any obligations specified in the request. All addenda shall become part of the final contract document.

<u>Item</u>	<u>Item Description</u>	<u>Annual Usage</u>	<u>Unit Price</u>	<u>Total</u>
1.	Center Sweep Design Strip Brush	90 each	\$_____	\$_____
2.	Strip Brush Mandrel	2 each	\$_____	\$_____
3.	Polypropylene Flat Brush Wafer	1,400 each	\$_____	\$_____
4.	Wire Flat Brush Wafer	400 each	\$_____	\$_____
5.	Brush Wafer Spacer	1,000 each	\$_____	\$_____
6.	Disposable-Type Gutter Broom Segment	1,300 each	\$_____	\$_____
7.	Total			\$_____

Note: Quantities indicated are for each not sets.

BID SECURITY REQUIRED: _____ **YES** X **NO**

AFFIRMATIVE ACTION PROGRAM: Successful bidder will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16). The Equal Opportunity Officer will determine compliance or non-compliance with the City's policy upon a complete and substantial review of successful bidder's equal opportunity policies, procedures and practices.

Special provisions for Commodity Term Contracts are included with the specification document. Bidders are urged to read the Special Provisions before completing the following sections of the Proposal.

TERM PRICE CLAUSE: BIDDER MUST STATE:

- (a) Bid prices firm for the full contract period:_____; or
- (b) Bid prices subject to escalation/de-escalation:_____.
- (c) If (b), state period for which prices will remain firm:
Through_____.

Contract Extension Renewal is an option: Yes____ No ____

INTERLOCAL PURCHASING: The City/County desires to make available to other local government entities of the State of Nebraska, by mutual agreement with the successful bidder, and properly authorized interlocal purchasing agreements, the right to purchase the same services, at the prices quoted, for the period of this contract. Each bidder shall indicated on the Bid Form in the space provided below if he/she will honor Political Subdivision orders in accordance with the contract terms and conditions, in addition to orders from City of Lincoln/Lancaster County.

____YES ____NO

If "YES", Contract supplier or suppliers may honor pricing and extend the contract to political sub-divisions, cities and counties. Terms and conditions of the contract must be met by political sub-divisions, cities and counties. Under no circumstances shall the City of Lincoln/Lancaster County be contractually obligated or liable for any purchases by these political sub-divisions, cities or counties.

COMPANY REPRESENTATIVE responsible for the administration of this Agreement:

NAME: _____
TITLE: _____
PHONE NO._____

AFFIRMATIVE ACTION PROGRAM: Successful bidder will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16). The Equal Opportunity Officer will determine compliance or non-compliance, upon a complete and substantial review of successful bidder's equal opportunity policies, procedures and practices.

The undersigned signatory for the bidder represents and warrants that he has full and complete authority to submit this proposal to the City, and to enter into a contract if this proposal is accepted.

The undersigned signatory for the bidder represents and warrants that he has full and complete authority to submit this proposal to the City, and to enter into a contract if this proposal is accepted.

RETURN 2 COMPLETE COPIES OF PROPOSAL AND SUPPORTING MATERIAL.
MARK OUTSIDE OF BID ENVELOPE: SEALED BID FOR SPEC. 04-136

COMPANY NAME

BY (Signature)

STREET ADDRESS or P.O. BOX

(Print Name)

CITY, STATE ZIP CODE

(Title)

TELEPHONE No. FAX No.

(Date)

**EMPLOYER'S FEDERAL I.D. NO.
OR SOCIAL SECURITY NUMBER**

ESTIMATED DELIVERY DAYS

E-MAIL ADDRESS

TERMS OF PAYMENT

Bids may be inspected in the Purchasing Division offices during normal business hours, after tabulation by the purchasing agent. If you desire a copy of the bid tabulation to be mailed to you, you must enclose a self-addressed stamped envelope with your bidding documents. Bid tabulations can also be viewed on our website at: lincoln.ne.gov Keyword: Bid

INSTRUCTIONS TO BIDDERS

CITY OF LINCOLN, NEBRASKA

PURCHASING DIVISION

1. BIDDING PROCEDURE

- 1.1 Bidder shall submit two (2) complete sets of the bid documents and all supporting material. All appropriate blanks shall be completed. Any interlineation, alteration or erasure on the specification document shall be initialed by the signer of the bid. Bidders shall not change the proposal form nor make additional stipulations on the specification document. Any amplified or qualifying information shall be on the bidder's letterhead and firmly attached to the specification document.
- 1.2 Bid prices shall be submitted on the Proposal Form included in the bid document.
- 1.3 Bidders may submit a bid on an "all or none" or "lump sum" basis, but should also submit a quotation on an item-by-item basis. Bidding documents shall be clearly marked indicating the kind of proposal being submitted.
- 1.4 Each bid must be legibly printed in ink or by typewriter, include the full name, business address, and telephone number of the bidder; and be signed in ink by the bidder.
- 1.5 A bid by a firm or organization other than a corporation must include the name and address of each member.
- 1.6 A bid by a corporation must be signed in the name of such corporation by a duly authorized official thereof.
- 1.7 Any person signing a bid for a firm, corporation, or other organization must show evidence of his authority so to bind such firm, corporation, or organization.
- 1.8 Bids received after the time and date established for receiving bids will be rejected.

2. BIDDER'S SECURITY

- 2.1 Bid security, as a guarantee of good faith, in the form of a certified check, cashier's check, or bidder's bond, may be required to be submitted with this bid document, as indicated on the Proposal Form.
- 2.2 If alternate bids are submitted, only one bid security will be required, provided the bid security is based on the amount of the highest gross bid.
- 2.3 Such bid security will be returned to the unsuccessful bidders when the award of bid is made.
- 2.4 Bid security will be returned to the successful bidder(s) as follows:
 - 2.4.1 For single order bids with specified quantities: upon the delivery of all equipment or merchandise, and upon final acceptance by the City.
 - 2.4.2 For all other contracts: upon approval by the City of the executed contract and bonds.
- 2.5 City shall have the right to retain the bid security of bidders to whom an award is being considered until either:
 - 2.5.1 A contract has been executed and bonds have been furnished.
 - 2.5.2 The specified time has elapsed so that the bids may be withdrawn.
 - 2.5.3 All bids have been rejected.

- 2.6 Bid security will be forfeited to the City as full liquidated damages, but not as a penalty, for any of the following reasons, as pertains to this specification document:

- 2.6.1 If the bidder fails to deliver the equipment or merchandise in full compliance with the accepted proposal and specifications.
- 2.6.2 If the bidder fails or refuses to enter into a contract on forms provided by the City, and/or if the bidder fails to provide sufficient bonds or insurance within the time period as established in this specification document.

3. EQUAL OPPORTUNITY

- 3.1 Each bidder agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, disability, age, or marital status. Bidder shall fully comply with the provisions of Chapter 11.08 of the Lincoln Municipal Code.
- 3.2 Successful bidder will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16).
- 3.3 The Equal Opportunity Officer will determine compliance or non-compliance with the City's Affirmative Action Policy upon a complete and substantial review of successful bidder's equal opportunity policies, procedures and practices.

4. DATA PRIVACY

- 4.1 Bidder agrees to abide by all applicable State and Federal laws and regulations concerning the handling and disclosure of private and confidential information concerning individuals and corporations as to inventions, copyrights, patents and patent rights.
- 4.2 The bidder agrees to hold the City harmless from any claims resulting from the bidder's unlawful disclosure or use of private or confidential information.

5. BIDDER'S REPRESENTATION

- 5.1 Each bidder by signing and submitting a bid, represents that the bidder has read and understands the specification documents, and the bid has been made in accordance therewith.
- 5.2 Each bidder for services further represents that the bidder is familiar with the local conditions under which the work is to be done and has correlated the observations with the requirements of the bid documents.

6. INDEPENDENT PRICE DETERMINATION

- 6.1 By signing and submitting this bid, the bidder certifies that the prices in this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder prior to bid opening directly or indirectly to any other bidder or to any competitor; no attempt has been made, or will be made, by the bidder to induce any person or firm to submit, or not to submit, a bid for the purpose of restricting competition.

7. CLARIFICATION OF SPECIFICATION DOCUMENTS

- 7.1 Bidders shall promptly notify the Purchasing Agent of any ambiguity, inconsistency or error which they may discover upon examination of the specification documents.
- 7.2 Bidders desiring clarification or interpretation of the specification documents shall make a written request which must reach the Purchasing Agent at least seven (7) calendar days prior to the date and time for receipt of bids.
- 7.3 Interpretations, corrections and changes made to the specification documents will be made by written addenda.
- 7.4 Oral interpretations or changes to the Specification Documents made in any other manner, will not be binding on the City; and bidders shall not rely upon such interpretations or changes.

8. ADDENDA

- 8.1 Addenda are written instruments issued by the City prior to the date for receipt of bids which modify or interpret the specification document by addition, deletion, clarification or correction.
- 8.2 Addenda will be mailed or delivered to all who are known by the City to have received a complete set of specification documents.
- 8.3 Copies of addenda will be made available for inspection at the office of the Purchasing Agent.
- 8.4 No addendum will be issued later than forty-eight (48) hours prior to the date and time for receipt of bids, except an addendum withdrawing the invitation to bid, or an addendum which includes postponement of the bid.
- 8.5 Bidders shall ascertain prior to submitting their bid that they have received all addenda issued, and they shall acknowledge receipt of addenda on the proposal form.

9. ANTI-LOBBYING PROVISION

- 9.1 During the period between the bid close date and the contract award, bidders, including their agents and representatives, shall not directly discuss or promote their bid with any member of the City Council or City Staff except in the course of City-sponsored inquiries, briefings, interviews, or presentations, unless requested by the City.

10. BRAND NAMES

- 10.1 Wherever in the specifications or proposal form brand names, manufacturer, trade name, or catalog numbers are specified, it is for the purpose of establishing a grade or quality of material only; and the term "or equal" is deemed to follow.
- 10.2 It is the bidder's responsibility to identify any alternate items offered in the bid, and prove to the satisfaction of the City that said item is equal to, or better than, the product specified.
- 10.3 Bids for alternate items shall be stated in the appropriate brand on the proposal form, or if the proposal form does not contain blanks for alternates, bidder MUST attach to the specification documents on Company letterhead a statement identifying the manufacturer and brand name of each proposed alternate, plus a complete description of the alternate items including illustrations, performance test data and any other information necessary for an evaluation. The bidder must indicate any variances by item number from the specification

document no matter how slight. Bidder must fully explain the variances from the specification document, since brochure information may not be sufficient.

- 10.4 If variations are not stated in the proposal, it will be assumed that the item being bid fully complies with the City's specifications.

11. DEMONSTRATIONS/SAMPLES

- 11.1 Bidders shall demonstrate the exact item(s) proposed within seven (7) calendar days from receipt of such request from the City.
- 11.2 Such demonstration can be at the City delivery location or a surrounding community.
- 11.3 If bidder does not have an item in the area, it will be at the bidder's expense to send appropriate City personnel to the nearest location to view and inspect proposed item(s).
- 11.4 If items are small and malleable, and the bidder is proposing an alternate product, the bidder MUST supply a sample of the exact item. Samples will be returned at bidder's expense after receipt by the City of acceptable goods. Bidders must indicate how samples are to be returned.

12. DELIVERY

- 12.1 Each bidder shall state on his proposal form the date upon which he can make delivery of all equipment or merchandise. Time required for delivery is hereby made an essential element of the bid.
- 12.2 The City reserves the right to cancel orders, or any part thereof, without obligation, if delivery is not made within the time(s) specified on the proposal form.
- 12.3 All bids shall be based upon **inside** delivery of the equipment or merchandise F.O.B. the City at the location specified by the City, with all transportation charges paid.

13. WARRANTIES, GUARANTEES AND MAINTENANCE

- 13.1 Copies of the following documents must accompany the bid proposal for all items being bid:
 - 13.1.1 Manufacturer's warranties and/or guarantees.
 - 13.1.2 Bidder's maintenance policies and associated costs.
- 13.2 As a minimum requirement of the City, the bidder will guarantee in writing that any defective components discovered within a one (1) year period after the date of acceptance shall be replaced at no expense to the City. Replacement parts of defective components shall be shipped at no cost to the City. Shipping costs for defective parts required to be returned to the bidder shall be paid by the bidder.
- 13.3 Bidder Warrants and represents to the City that all software/firmware/hardware/equipment/systems developed, distributed, installed or programmed by Bidder pursuant to this Specification and Agreement.
 - 13.3.1 That all date recognition and processing by the software/firmware/hardware/equipment/system will include the four-digit-year format and will correctly recognize and process the date of February 29, and any related data, during Leap years; and
 - 13.3.2 That all date sorting by the software /firmware/hardware/equipment/system that includes a "year category" shall be done based on the four-digit-year format. Upon being notified in writing by the City of the failure of any software/ firmware/

hardware /equipment /systems to comply with this Specification and Agreement, Contractor will, within 60 days and at no cost to the City, replace or correct the non-complying software/ firmware/ hardware/ equipment/ systems with software/firmware/ hardware/equipment/ systems that does comply with this Specification and Agreement.

- 13.3.3 No Disclaimers: The warranties and representations set forth in this section 13.3 shall not be subject to any disclaimer or exclusion of warranties or to any limitations of Licensor's liability under this Specification and Agreement.

14. ACCEPTANCE OF MATERIAL

- 14.1 All components used in the manufacture or construction of materials, supplies and equipment, and all finished materials, shall be new, the latest make/model, of the best quality, and the highest grade workmanship.
- 14.2 Material delivered under this proposal shall remain the property of the bidder until:
- 14.2.1 A physical inspection and actual usage of this material is made and found to be acceptable to the City; and
- 14.2.2 Material is determined to be in full compliance with the specifications and accepted proposal.
- 14.3 In the event the delivered material is found to be defective or does not conform to the specification documents and accepted proposal, then the City reserves the right to cancel the order upon written notice to the bidder and return materials to the bidder at bidder's expense.
- 14.4 Successful bidder shall be required to furnish title to the material, free and clear of all liens and encumbrances, issued in the name of the City of Lincoln, Nebraska, as required by the specification documents or purchase orders.
- 14.5 Selling dealer's advertising decals, stickers or other signs shall not be affixed to equipment. Vehicle mud flaps shall be installed blank side out with no advertisements. Manufacturer's standard production forgings, stampings, nameplates and logos are acceptable.

15. BID EVALUATION AND AWARD

- 15.1 The signed bid proposal shall be considered an offer on the part of the bidder. Such offer shall be deemed accepted upon issuance by the City of purchase orders, contract award notifications, or other contract documents appropriate to the work.
- 15.2 No bid shall be modified or withdrawn for a period of ninety (90) calendar days after the time and date established for receiving bids, and each bidder so agrees in submitting the bid.
- 15.3 In case of a discrepancy between the unit prices and their extensions, the unit prices shall govern.
- 15.4 The bid will be awarded to the lowest responsive, responsible bidder whose proposal will be most advantageous to the City, and as the City deems will best serve their requirements.
- 15.5 The City reserves the right to accept or reject any or all bids; to request rebids; to award bids item-by-item, by groups, or "lump sum"; to waive irregularities and technicalities in bids; such as shall best serve the requirements and interests of the City.

16. INDEMNIFICATION

- 16.1 The bidder shall indemnify and hold harmless the City, its members, its officers and employees from and against all claims, damages, losses, and expenses, including, but not limited to attorney's fees arising out of or resulting from the performance of the contract, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property other than goods, materials and equipment furnished under this contract) including the loss or use resulting therefrom; is caused in whole or part by any negligent act or omission of the bidder, any subcontractor, or anyone directly or indirectly employed by any one of them or anyone for whose acts made by any of them may be liable, regardless of whether or not it is caused by a party indemnified hereunder.
- 16.2 In any and all claims against the City or any of its members, officers or employees by an employee of the bidder, any subcontractor, anyone directly or indirectly employed by any of them or by anyone for whose acts made by any of them may be liable, the indemnification obligation under paragraph 16.1 shall not be limited in any way by any limitation of the amount or type of damages, compensation or benefits payable by or for the bidder or any subcontractor under worker's or workmen's compensation acts, disability benefit acts or other employee benefit acts.

17. TERMS OF PAYMENT

- 17.1 Unless other specification provisions state otherwise, payment in full will be made by the City within thirty (30) calendar days after all labor has been performed and all equipment or other merchandise has been delivered, and all such labor and equipment and other materials have met all contract specifications.

18. LAWS

- 18.1 The Laws of the State of Nebraska shall govern the rights, obligations, and remedies of the Parties under this proposal and any agreement reached as a result of this process.

SPECIAL PROVISIONS FOR COMMODITY TERM CONTRACTS

CITY OF LINCOLN, NEBRASKA PURCHASING DIVISION

1. ESTIMATED QUANTITIES

- 1.1 The quantities set forth in the specification document are approximate and represent the estimated requirements of the City for the contract period.
- 1.2 Items listed may or may not be inclusive of City requirements for this category.
- 1.3 Category items not listed, but distributed by bidder are to be referred to as kindred items. Kindred items shall receive the same percentage of discount or pricing structure as items listed in the specification document.
- 1.4 The unit prices and the extended total prices shall be used only as a basis for the evaluation of bids. The actual quantity of materials necessary may be more or less than the estimates listed in the specification document, but the City shall be neither obligated nor limited to any specified amount. The City will, if possible, restrict increases/decreases to 20% of the estimated quantities listed in the specification document.

2. CONTRACT PERIOD

- 2.1 The material shall be delivered as ordered during the contract period, beginning from the date of contract and ending one (1) year from that date, or as otherwise indicated on the proposal form.
- 2.2 The City is interested in a one (1) year contract, with the option to renew for additional one (1) year periods, not to exceed three (3) such renewals. Bidder must indicate on the proposal form if extension renewals are an option. By mutual consent of both parties it is understood and agreed that the contract may be renewed only at the same prices and/or under the same conditions governing the original contract; and any request for an increase in price or a change in the contract conditions shall be interpreted as a request not to renew the contract at the end of the current contract period.

3. BID PRICES

- 3.1 Bidders must state on the proposal form if the bid prices will remain firm for the full contract period; or if the bid prices will be subject to escalation/de-escalation.
- 3.2 Escalation/De-escalation Clause: In the event that prevailing market conditions warrant an adjustment in bid prices contained in the contract, the following escalation/de-escalation clause shall be the only clause applicable or acceptable to the City:
 1. Contractor shall give written notice to the Purchasing Agent of any proposed changes from contract prices not less than thirty (30) calendar days prior to the effective date of said price changes.
 2. Such notice must be accompanied by a certified copy of the supplier's advisory or notification to the contractor of price changes.
 3. No price escalation will be authorized in excess of the amount of the increase referred to on the supplier's notice.
 4. The approved price change shall be honored for all orders received by the contractor after the effective date of such price change.

5. Approved price changes are not applicable to orders already issued and in process at time of price change.
6. The City reserves the right to audit and/or examine any pertinent books, documents, papers, records or invoices relating directly to the contract transaction in question after reasonable notice and during normal business hours.
7. The Purchasing Agent retains the right to determine whether or not such proposed price changes are in the best interests of the City.
8. If in the opinion of the Purchasing Agent any proposed increase is found unacceptable, the Purchasing Agent reserves the right to cancel the contract upon thirty (30) calendar days written notice.
9. Contractors must tie any price change clause to an industry-wide or otherwise nationally recognized index, or some other form of verifiable document. Contractor will put the Purchasing Agent on the mailing lists for such publication so that the Purchasing Agent can monitor said changes. Such membership will be at no cost to the City.

4. CONTRACT AWARD NOTIFICATION

- 4.1 The Purchasing Division will issue a Contract Award Notification to all successful bidders. Such contract award notification will incorporate the City's specifications, and may incorporate the bidder's specifications.
- 4.2 No action need be taken by the contractors at time of receipt of such Contract Award Notification.
- 4.3 Orders for materials will be made as needed by the various City Departments.

5. QUARTERLY REPORT

- 5.1 The contractor shall provide to the Purchasing Agent a quarterly report, showing all purchases made under the terms and conditions of the contract.
- 5.2 Such quarterly report shall itemize the following information:
 1. Each ordering department.
 2. Items and quantities purchased by department.
 3. Total dollar amount of purchases by department.

STREET SWEEPER REPLACEMENT **BROOM SPECIFICATIONS**

1. GENERAL INFORMATION

- 1.1 Bids are requested for the annual requirement of the City of Lincoln for providing **Gutter Brooms, Main Broom Materials and Main Broom Mandrels** to be furnished and delivered as may be required during the contract period.
- 1.2 The following specifications are intended to describe minimum material and product support requirements.
- 1.3 All broom materials provided must meet or exceed Elgin Eagle OEM broom specifications.
- 1.4 Prices indicated on the bid schedule shall include all costs including shipping and handling.
- 1.5 Quantities stated herein are only estimates of the City of Lincoln requirement's
 - 1.5.1 Vendor agrees to provide more or less than the estimate in accordance with actual needs as they occur throughout the contract period at the unit price(s) quoted.
- 1.6 Bid items will be ordered as needed by the city.
 - 1.6.1 Bidders are not to interpret this as a one-time order and shipment.
- 1.7 Exceptions to any part of this bid document shall be clearly noted by Item # on your company letterhead and by the appropriate authority.

2. ILLUSTRATIVE AND TECHNICAL DATA

- 2.1 Bidder must submit with bid, complete illustrative and technical data on materials proposed to be furnished.
- 2.2 Failure to provide such materials may void bid.

3. DELIVERY

- 3.1 All material will be delivered F.O.B. Fleet Services Garage, 901 North 6th Street, Lincoln, NE., Monday through Friday 8:00 am to 4:00 pm.
- 3.2 Delivery will be made within 15 calendar days after receipt of order.

4. BID AWARD CRITERIA

- 4.1 Conformance to the specification.
- 4.2 The ability to meet stated delivery requirements.
- 4.3 Previous experience with both the bidder and product being provided.
- 4.4 Best overall value to the City of Lincoln.

5. CENTER SWEEP DESIGN STRIP BRUSH

- 5.1 Number of strips in set: 18 each
- 5.3 Outside Diameter: 36"
- 5.4 Trim: 13"
- 5.5 Width: 1.35" (+0/-0.020)

5. CENTER SWEEP DESIGN STRIP BRUSH (continued)

- 5.6 Finished Weight per Strip: 6 lbs. 3 oz. (+/-3-5%)
- 5.7 Poly Content Weight per Strip: 5 lbs. 14 oz.
- 5.8 Physical properties of polypropylene brush filament:
 - 5.8.1 Material: Virgin 3 melt Polypropylene plastic, prime grade.
 - 5.8.2 Size: .090" x .110"
 - 5.8.3 Specific Gravity: 0.90
 - 5.8.4 Water Absorption: .08% or less.
 - 5.8.5 Melt Range: 330 to 340 degree Fahrenheit.
 - 5.8.6 Tensile Strength: 31,000 to 32,000 psi.
 - 5.8.7 Breaking Load: 204 lbs.
 - 5.8.8 Elongation Factor: 20% or better.
 - 5.8.9 Polypropylene shall be resistant to mildew, oils, greases, acids and other common chemicals.
 - 5.8.10 Filaments must be continuous run throughout the length of strip and be free of voids, bubbles, cracks, dead spots or crimp distortion.
- 5.9 Backing Material: 100% Extruded High Density Co-polypropylene.
- 5.10 Strip brush sections shall be packaged in heavy-duty, securely bound cartons to prevent damage in shipping.

6. STRIP BRUSH MANDREL

- 6.1 Number of Channels: 18
- 6.2 Inside Diameter: 8.5"
- 6.3 Length: 60"
- 6.4 Channel: 0.063"
- 6.5 Tube Construction: 14 gauge, hot rolled.

7. POLYPROPYLENE FLAT BRUSH WAFER

- 7.1 Number of wafers in set: Varies.
- 7.2 Inside Diameter: 10"
- 7.3 Outside Diameter: 36" (+0.25/-0.00)
- 7.4 Width: .550" (+.015/-0.00)
- 7.5 Finished Weight per Wafer: 4 lbs. (+/-3-5%)
- 7.6 Poly Content Weight per Wafer: 3.06 lbs.
- 7.7 Physical properties of polypropylene brush filament:
 - 7.7.1 Material: Virgin 3 melt Polypropylene plastic, prime grade.
 - 7.7.2 Size: .080" x .095"
 - 7.7.3 Specific Gravity: 0.90
 - 7.7.4 Water Absorption: .08% or less.
 - 7.7.5 Melt Range: 330 to 340 degree Fahrenheit.
 - 7.7.6 Tensile Strength: 31,000 to 32,000 psi.
 - 7.7.7 Break Load: 204 lbs.
 - 7.7.8 Elongation Factor: 20% or better.
 - 7.7.9 Polypropylene shall be resistant to mildew, oils, greases, acids and other common chemicals.
 - 7.7.10 Filaments shall be free of voids, bubbles, cracks, dead spots or crimp distortion.

7. POLYPROPYLENE FLAT BRUSH WAFER (continued)

- 7.8 Brush Ring Construction.
 - 7.8.1 Formed from 18 gauge premium coil steel stock into solid continuous ring and securely welded at ends.
 - 7.8.2 Ring sides shall be 1" high.
 - 7.8.3 Drive pin(s) shall be 5/16" steel, extending 9/16" from inner diameter of brush ring.
 - 7.8.4 Filament shall be held securely in place with brush ring closed every 1" (+/-1/8").
- 7.9 Flat poly bush wafers shall be packaged in heavy-duty, solidly bound cartons to prevent damage in shipping.

8. WIRE FLAT BRUSH WAFER

- 8.1 Number of wafers in set: Varies
- 8.2 Inside Diameter: 10"
- 8.3 Outside Diameter: 36" (+.025/-0.00)
- 8.4 Width: .550" (+.015/-0.00)
- 8.5 Finished Weight per Wafer: 5.6 lbs. (+/-3-5%)
- 8.6 Wire Content Weight per Wafer: 4.48 lbs.
- 8.7 Physical Properties of Wire Filament
 - 8.7.1 Material: High grade, hard-drawn high carbon steel, crimped on two separate planes.
 - 8.7.2 Size: 0.275"
 - 8.7.3 Tensile Strength: 240,000 psi.
- 8.8 Brush Ring Construction.
 - 8.8.1 Formed from 18 gauge premium coil steel stock into solid continuous ring and securely welded at ends.
 - 8.8.2 Ring sides shall be 1" high.
 - 8.8.3 Drive pin(s) shall be 5/16" steel, extending 9/16" from inner diameter of brush ring.
 - 8.8.4 Filament shall be held securely in place with brush ring closed every 1" (+/-1/8").
- 8.9 Flat wire brush wafers shall be packaged in heavy-duty, solidly bound cartons to prevent damage in shipping.

9. BRUSH WAFER SPACER

- 9.1 Material: Per-formed steel, non-collapsing design.
- 9.2 Inside Diameter: 10"
- 9.3 Width: 1.5"

10. DISPOSABLE-TYPE GUTTER BROOM SEGMENTS

- 10.1 Number of segments in set: 5 each.
- 10.2 Mounting: Bolt-on design.
- 10.3 Segment Head: High-impact, high-density molded polyethylene construction.
- 10.4 Holes per Segment: 31
- 10.5 Wire per Hole: 18

10. DISPOSABLE-TYPE GUTTER BROOM SEGMENTS (continued)

- 10.6 Finished Weight per Segment: 15 lbs.
 - 10.6.1 Maximum Finished Weight per Segment: 16 lbs.
- 10.7 Wire Content Weight per Segment: 14 lbs. (+/-1)
- 10.8 Physical properties of wire broom filament.
 - 10.8.1 Material: Wire shall be manufactured to the specifications of the Fine & Speciality Wire manufacturers Association. This thermoforming process involves a high temperature rolling process, followed by a special oil coating for hardening to give high abrasion resistance, good elastic and fatigue properties, with sufficient strength to bend as required.
 - 10.8.2 Size: 0.026" x 0.126" x 26"
 - 10.8.2.1 Dimension Tolerance:
 - 10.8.2.2 Width: +/- 0.005"
 - 10.8.2.3 Thickness: +/- 0.001"
 - 10.8.2.4 Length: +/- 0.125"
 - 10.8.3 Tensile Strength: 235,000 - 265,000 psi.
 - 10.8.4 Relative Hardness: 41 - 45 on Rockwell "C" Scale.
 - 10.8.5 Carbon: 0.60% - 0.75%.
 - 10.8.6 Silicone 0.10% - 0.30%
 - 10.8.7 Sulphur: 0.040% Maximum.
 - 10.8.8 Manganese: 0.50% - 0.80%
 - 10.8.9 Phosphorous: 0.040% Maximum.
- 10.9 Gutter broom segments shall be packaged in heavy-duty, securely bound cartons to prevent damage in shipping.

11. MATERIAL AND PERFORMANCE WARRANTY

- 11.1 All brooms and brushes provided under this contract shall be guaranteed against breakage, loss of filament and extreme premature wear under normal operating conditions.
 - 11.1.1 Damage or premature wear due to equipment malfunction or improper adjustment is excluded from this warranty.
- 11.2 Any brooms or brushes demonstrating breakage, loss of filament or premature wear will be replaced free of charge by the vendor, with no wear adjustment or handling charges to be paid by the City of Lincoln.
- 11.3 Random quality inspections and confirmation of material weights will be performed by the City of Lincoln.
 - 11.3.1 All brooms and brushes failing to meet quality and material weight requirements will be replaced free of charge by the vendor, with no handling charges to be paid by the City of Lincoln.